



# FHWA Resource Center

---

Peter W. Osborn

Technical Service Team Leader  
*for* Geotechnical and Hydraulics  
Federal Highway Administration  
Baltimore, Maryland



U.S. Department  
of Transportation

**Federal Highway  
Administration**

# **The FHWA Resource Center**

**Atlanta - Baltimore – Olympia Fields - San Francisco**



# Resource Center Vision

---

To be the best at deploying  
transportation technologies.



# Resource Center Mission

---

To advance the use of  
transportation technologies  
through training and technical  
assistance.



# Resource Center

---

## **Provides:**

- Technical Assistance,
- Training, and
- Technology Deployment



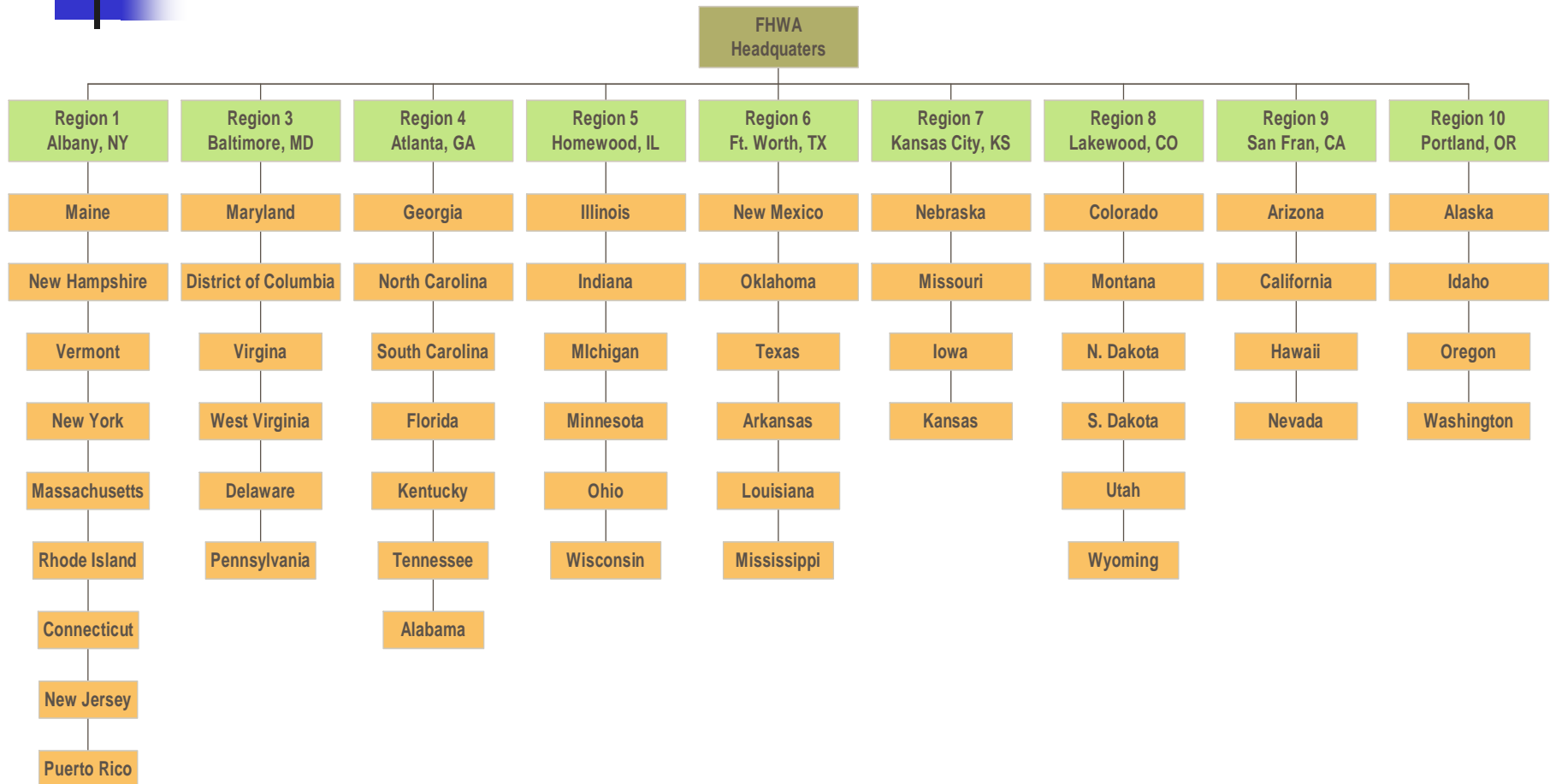
# Where we started...

---

- **1998-1999 Restructuring**
  - Delegated more to Divisions
  - Reorganized HQ around core businesses
  - A new entity formed—**Resource Centers**

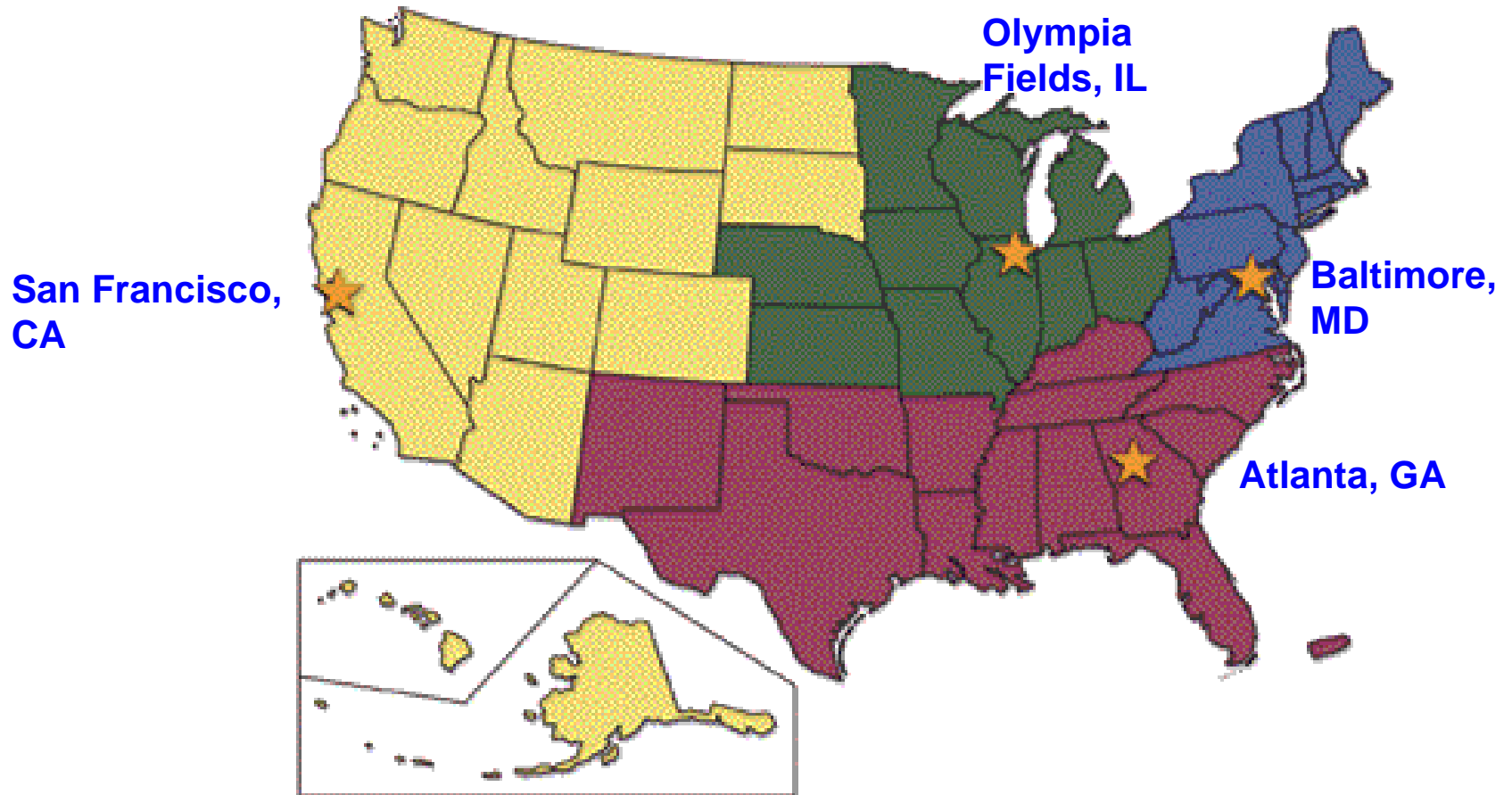


# FHWA - pre-restructuring, Sept. 98



1998

*Serving our primary customers –*



Four Resource Centers –  
Four Locations





# Restructuring Assessment of Customer Service: 2001-02

---

- 200 focus groups with state DOTs
- 138 listening sessions with FHWA employees
- 422 in-depth interviews with industry leaders



# Restructuring Assessment - 2002

---

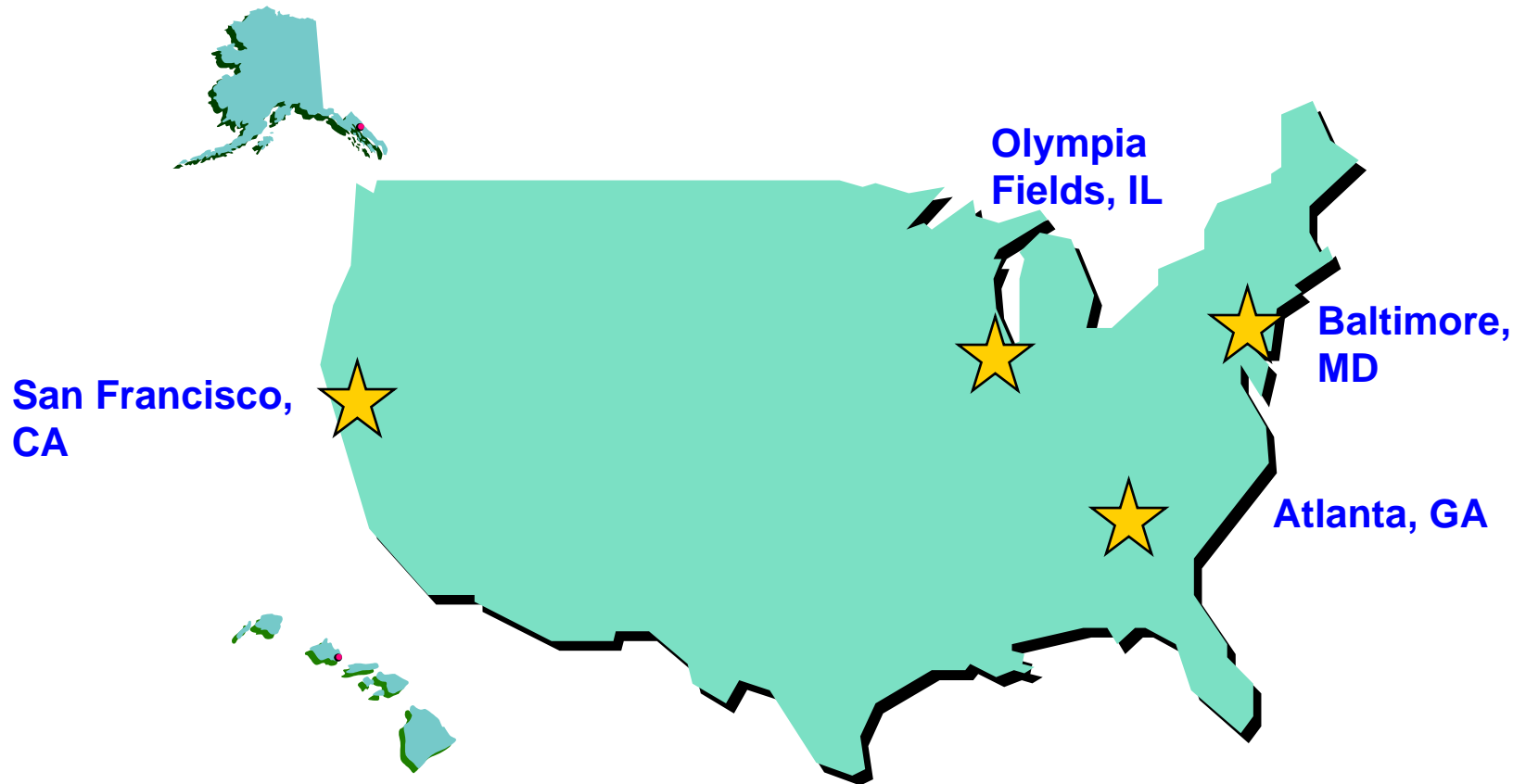
- **Conclusions – 3 Themes**

- FHWA must

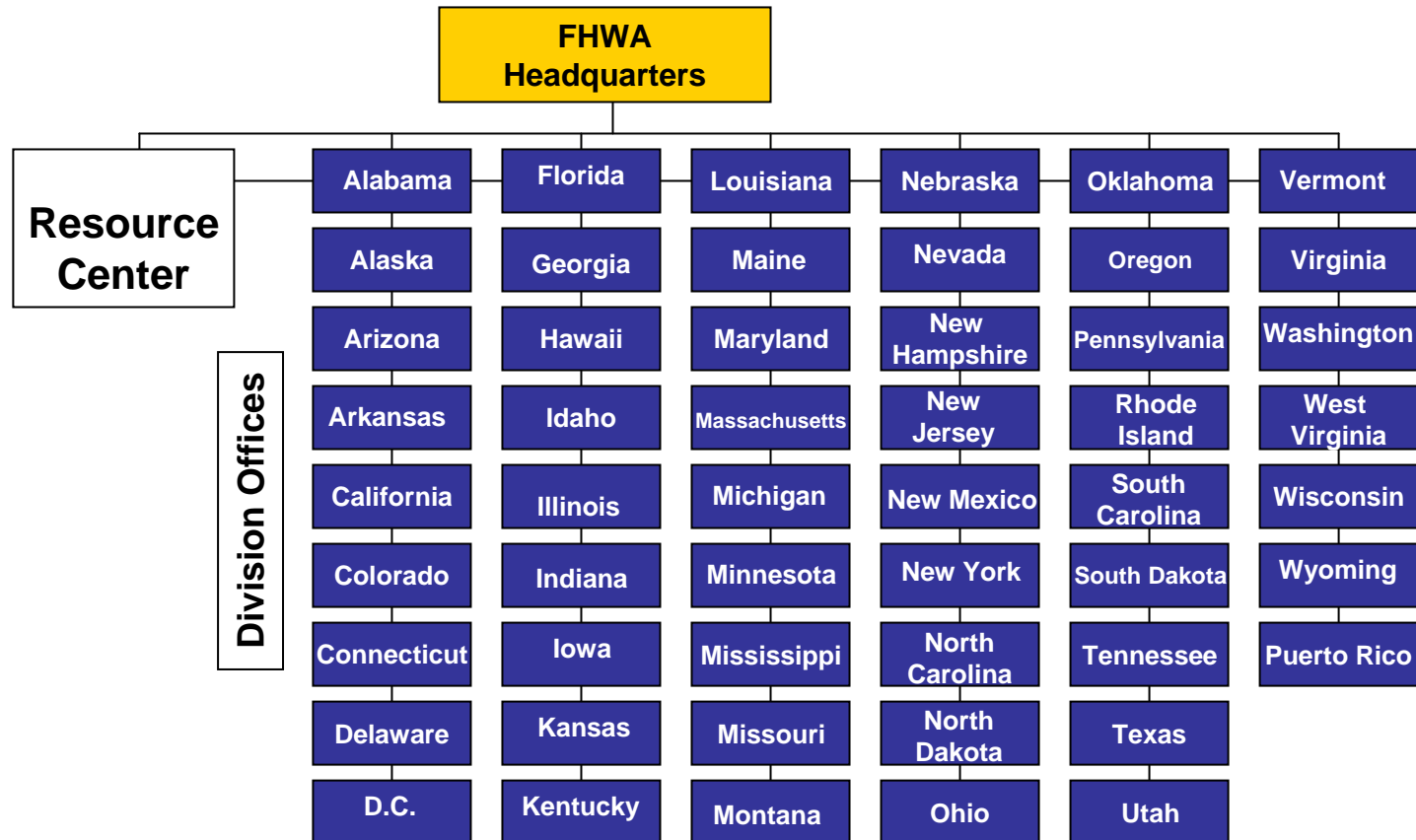
- Act corporately
    - Significantly raise the bar on deploying technology
    - Commit to the development of its technical expertise

2003:

*Serving customers nationwide --*

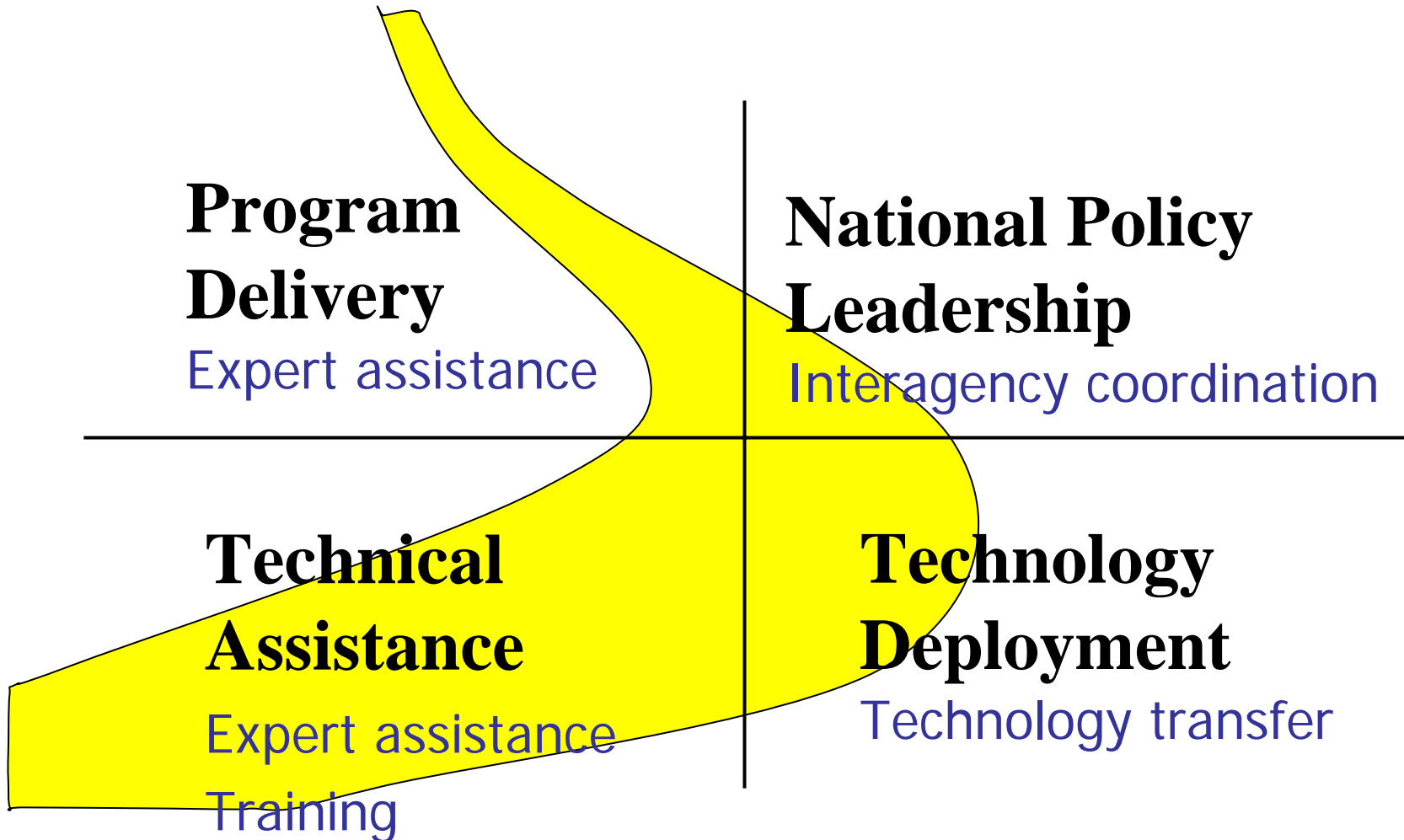


One Resource Center –  
Four Locations



# ***FHWA Key Processes***

## ***Resource Center Subprocesses***





# Push - Pull

---

- **Push** -- Headquarters
  - Initiatives
  - Training
- **Pull** -- Divisions
  - Needs
    - Technical Assistance
    - Training
    - Technology and Innovation Deployment



# Our Working Relationships

---

- Division Offices
- FHWA Headquarters
- Federal Lands Offices
- Turner Fairbanks HRC
- State DOTs
- Metropolitan Planning Organizations (MPOs)
- Federal Agencies
- LTAP Centers
- Local Agencies
- Industry & Associations
- General Public



# Technical Service Teams

---

- Air Quality
- Civil Rights
- Construction & Project Management
- Environment
- Finance
- Geotech & Hydraulics
- Operations
- Pavements & Materials
- Planning
- Safety & Highway Design
- Structures



# Technical Service Team Groupings

*San  
Francisco*

**Environment**

**Planning**

**Air Quality**

**Construction  
& Project Mgmt  
Pavements  
& Materials  
Finance**

*Atlanta*

*Baltimore*

**Geotech &  
Hydraulics**

**Structures**

**Safety & Highway  
Design**

**Operations**

*Olympia  
Fields*

**Civil Rights**

To Be Assigned



# Resource Center at Baltimore

---

- Resource Center Manager
  - Joyce Curtis
- Geotech and Hydraulics TST Leader
  - Peter Osborn
- Structures TST Leader
  - Shoukry Elnahal



# Geotechnical and Hydraulics

Peter W. Osborn, Team Leader

---

## ■ Hydraulics Engineers

- Larry Arneson, CO
- Dan Ghere, IL
- VACANT, MD
- Cynthia Nurmi, GA

## ■ Geotech Engineers

- Barry Berkovitz, GA
- Chris Dumas, MD
- Sam Mansukhani, IL
- Silas Nichols, MD
- Ben Rivers, GA
- Barry Siel, CO



# Geotech & Hydraulics Team

- Baltimore

---

## Geotechnical

- Soil slopes & embankments
- Ground Improvements
- Foundations
- Reinforced Soil Structures
- Geosynthetics
- Rock Slopes
- Subsurface Investigations
- Earthquake Engineering
- Instrumentation

## Hydraulics

- Bridge Scour
- Culvert Analysis/Design
- Hydraulics & Hydrology
- Urban Drainage
- Pump Stations
- Stream Stability and Scour
- Sediment Transport
- River Mechanics
- Numeric Modeling



# Geotech & Hydraulics Team

## *Available Training*

---

- Driven Piling
- Drilled Shafts
- Reinforced Soil Structures-MSE/RSS
- Construction Inspector Qualification
- *plus 20 NHI Courses*
- Hydrology Overview
- Tidal Hydraulics
- Culvert Overview
- Bridge Backwater Basics
- FEMA Floodplain Workshop
- *plus 13 NHI Courses*



# Geotech & Hydraulics Team

## *Program Reviews*

---

- Team Reviews
  - State/Division/RC/Hqtrs
- Identify Exemplary Practices
- Identify areas for improvement
- Comprehensive Team Report
  - Commendations
  - Findings
  - Recommendations



# Structures Team

- Baltimore

---

- Bridge management/  
NBIS
- Structural design
- Complex structures
- Finite element modeling
- Cargo tank issues
- High performance  
structural materials
- Jointless bridges
- Tunnel Management  
System



# Construction & Project Management Team - Atlanta

---

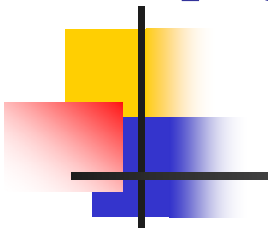
- Innovative Contracting expertise
- Incentive Programs
- Design-Build
- A+B Construction



# Pavements & Materials Team

- Atlanta

---

- 
- Materials & QC/QA
  - Pavement Smoothness
  - AASHTO Design Guide
  - Knowledge Building
  - LTPP
  - Technical Training & Certification (WAQTC)
  - Superpave
  - HIPERPAV Software for PCCP Analysis
  - Pavement Management Systems
  - Life Cycle Cost Analysis
  - Regional Quality Initiatives



# Finance Team

- Atlanta

---

- Financial Management Initiatives
- Financial technique briefings
- AASHTO Audit Liaison
- Accounting & auditing systems management
- Project financing assistance



# Safety & Highway Design Team - Olympia Fields

---

- Geometric design
- Safety engineering
- NHTSA liaisons
- Older driver issues
- HSIP
- Pedestrian/bike safety
- Roadside design
- Context sensitive design
- MUTCD 2000
- Work zones
- Red light running
- Safety outreach programs
- Retroreflectivity
- Traffic calming
- Section 402



# Operations Team

## - Olympia Fields

---

- ITS program, architecture & rural issues
- Incident management
- Freeway management
- CORSIM
- Emergency preparedness



# Environment Team

- San Francisco

---

- Environmental program
- Biology/water quality
- Biology resources
- Environmental streamlining
- Environmental Justice
- NEPA/404 coordination
- Flexible mitigation techniques
- Section 106
- Section 4(f)
- Endangered Species



# Planning Team

## - San Francisco

---

- Intermodal & statewide planning
- NAFTA planning
- Highway finance
- Metropolitan planning
- Environmental justice
- STIPs/TIPs
- Long-Range Plans
- Congestion management



# Air Quality Team

- San Francisco

---

- Air quality
- Air quality policy issues
- Conformity
- CMAQ program
- AQ modeling
- Clean Air Act provisions



# Civil Rights Team

- Location to be determined

---

- Complaint investigation
- Contract compliance
- Americans with Disabilities Act (ADA)
- Title VI
- Garrett A. Morgan initiatives
- Environmental justice
- Disadvantaged Business Enterprises (DBE)





# Other Resource Center Staff

- Expertise in every location

---

- Administrative Staff
- Communications/Media
- Information Analysis
- Marketing
- Strategic Planning/Quality Journey
- Technology and Innovation Deployment



# Communications/Media

---

- Media Training
- Reporter relations
- Writing
- Media events
- Outreach
- Effective communication training
- Presentation Skills
- Editing
- News conferences
- Speechwriting
- Interpersonal communications



# Information Analysis

---

- Statistical analysis
- Survey research & design
- Performance metrics
- Performance measures
- Program evaluation
- Regression modeling
- Data quality
- Quality Improvement Process design
- Customer surveys
- Customer focus
- Organizational assessments



# Marketing

---

- Marketing training
- Market research
- Marketing plans
- Marketing tools  
(brochures, exhibits,  
videos, CD-ROMs)
- Special event  
planning &  
coordination
- Customer relationship  
management
- Graphic design  
contracting



# Strategic Planning/ Quality Journey

---

- Strategic & performance planning
- Organizational design & effectiveness
- Performance management
- Performance improvement techniques
- Quality improvement applications



# Technology & Innovation Deployment

---

- Emerging Technology
- Market Ready Technology
- Innovations
- Research Results
- Deployment
- Workshops
- Conferences
- Demonstrations



# Resource Center

## Customer Service – Job One

---

### ■ **Contacts**

- Technical Service Team Leaders
- Technical Service Team Members
- Resource Center Managers

### ■ **Contact via**

- Telephone
- E-mail
- Snail mail



# Resource Center

## Customer Service – Job One!

---

- **Old - 4 Web sites**
- **One Resource Center – Four Locations Web site**
  - Launched May 5, 2003
    - Link from Staffnet
    - Link from FHWA “Homepage”
    - <http://www.fhwa.dot.gov/resourcecenter/index.htm>





# The FHWA Resource Center

---

*Technical Assistance and  
Technology Deployment  
Reaching the Customer*

Bringing tomorrow's  
solutions to today's  
transportation needs



# *THE CHALLENGE*

---



# Thank You!

---

*Comments?*

*Questions?*

*Please remember it's*  
Osborn NOT Osbourne

